

CLAIMS

What is claimed is:

1. A method for production of a metallic or metal-containing layer using a precursor on a silicon- or germanium- containing layer of, in particular, an electronic component, in which an intermediate layer is applied to the silicon- or germanium- containing layer before the precursor is used, said intermediate layer forming a diffusion barrier at least for the elements of the precursor which would etch the silicon- or germanium- containing layer and itself being etching-resistant relative to the precursor, wherein the intermediate layer is applied with a thickness of a few atomic layers in an ALD method.
- 15 2. The method as claimed in claim 1, wherein a dielectric is used as the intermediate layer.
3. The method as claimed in claim 2, wherein an Al, Ta, Hf, Ti or Zr oxide is used as the dielectric.
- 20 4. The method as claimed in claim 1, wherein a thermostable intermediate layer is used.
- 25 5. The method as claimed in claim 1, wherein the intermediate layer is stabilized in a thermal step.
- 30 6. The method as claimed in claim 1, wherein an intermediate layer is used which enables a diffusion in the context of a subsequent silicide process serving for production of the metallic or metal-containing layer.
- 35 7. The method as claimed in claim 6, wherein, after the silicide process has been carried out, the metallic or metal-containing layer lying above the intermediate layer and, if appropriate, also the intermediate layer

are/is removed in particular by etching which is selective with respect to the intermediate layer.

8. The method as claimed in claim 1, wherein a
5 thermally unstable layer is used, which decomposes in a subsequent, if appropriate further thermal step, in particular in the context of a subsequent silicide process serving for production of the metallic or metal-containing layer.

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9. An electronic component comprising a silicon- or germanium- containing layer and a metallic or metal-containing layer fabricated on the silicon- or germanium- containing layer by the method as claimed in
15 claim 1.

10. The electronic component as claimed in claim 9, wherein the metallic or metal-containing layer is situated above, below or on both sides of the
20 intermediate layer.